UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/750,288
Filing Date: December 29, 2000
Appellant(s): KEELY ET AL.

MAILED

DEC 1 4 2004

Technology Center 2600

Darrell G. Mottley
<u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 14, 2004.

(1)   Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2)   Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly

affect or be directly affected by or have a bearing on the decision in the pending appeal

is contained in the brief.

(3)   Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4)   Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection

contained in the brief is correct.

(5)   Summary of Invention

The summary of invention contained in the brief is correct.

(6)   Issues

The appellant's statement of the issues in the brief is correct.

(7)   Grouping of Claims

Appellant's brief includes a statement that claims 1-30 do not stand or fall

together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8)   Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9)   Prior Art of Record

6,335,727	Morishita et al.	1-2002
6,340,967	Maxted	1-2002
6,384,815	Huang	5-2002
5,889,523	Wilcox et al.	3-1999

(10)   Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites "maintained despite re-flowing of said displayed information by a layout engine". This limitation is not clear because the term despite makes it not clear whether the re-flowing is carried out or not.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2, 7, 8 and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by

Morishita et al. (US patent NO. 6,335,727; hereinafter referred to as Morishita).

As to independent claim 2, Morishita (figures 44A, 44B and 44C) teaches a

computer-implemented method for adding electronic ink to displayed information on a

system having a display (col. 3, lines 61-67). Morishita teaches classifying the electronic

ink (the classifying of the electronic ink is the classifying of first and second mode as

shown in figures 44A and 44B) (col. 25, lines 27-41). Morishita teaches associating the

electronic ink with at least one object of the displayed information (the association of the

electronic ink with at least one object on the display is the searching a written image in a

region enclosed within a closed curve as shown in figures 44A and 44B) (col. 25, lines

41-57). Morishita teaches that the electronic ink is embedded ink (col. 30, line 64

through col. 31, line 10).

As to claim 7, Morishita (figures 44A, 44B and 44C) teaches a computer-

implemented method for adding electronic ink to displayed information on a system

having a display (col. 3, lines 61-67). Morishita teaches classifying the electronic ink

(the classifying of the electronic ink is the classifying of first and second mode as shown

in figures 44A and 44B) (col. 25, lines 27-41). Morishita teaches associating the

electronic ink with at least one object of the displayed information (the association of the

electronic ink with at least one object on the display is the searching a written image in a

region enclosed within a closed curve as shown in figures 44A and 44B) (col. 25, lines

41-57). As can be seen above, the closed curve is near the search region, which is

similar to the limitation of claim 7 (col. 25, lines 41-58).

As to claim 8, Morishita (figures 44A, 44B and 44C) teaches a computer-implemented method for adding electronic ink to displayed information on a system having a display (col. 3, lines 61-67). Morishita teaches classifying the electronic ink (the classifying of the electronic ink is the classifying of first and second mode as shown in figures 44A and 44B) (col. 25, lines 27-41). Morishita teaches associating the electronic ink with at least one object of the displayed information (the association of the electronic ink with at least one object on the display is the searching a written image in a region enclosed within a closed curve as shown in figures 44A and 44B) (col. 25, lines 41-57). Morishita teaches that the electronic ink is embedded ink (col. 30, line 64 through col. 31, line 10). As best understood by the examiner, Morishita (figures 44A and 44B) shows that the electronic ink (the dashed line by the pen) is maintained despite having other information (re-flowing).

As to claims 27-28, the claims are also similar to claim 2 and are rejected as applied to claim 2 above.

As to claim 29, the claim is broad enough that the handwriting shown for example in figure 36 is an in-flow of at least one object.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-6, 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Morishita in view of Maxted (US patent NO. 6,340,967).

As to claim 1, Morishita (figures 44A, 44B and 44C) teaches a computer-

implemented method for adding electronic ink to displayed information on a system

having a display (col. 3, lines 61-67). Morishita teaches classifying the electronic ink

(the classifying of the electronic ink is the classifying of first and second mode as shown

in figures 44A and 44B) (col. 25, lines 27-41). Morishita teaches associating the

electronic ink with at least one object of the displayed information (the association of the

electronic ink with at least one object on the display is the searching a written image in a

region enclosed within a closed curve as shown in figures 44A and 44B) (col. 25, lines

41-57).

Morishita does not expressly teach that the classifying of the electronic ink is

based on a shape of the electronic ink.

However, Maxted teaches a pen based edit correction interface, wherein the user

simply writes or prints on an active surface of a digitizer and the ordered set of strokes

displayed on the computer screen as Electronic Ink (col. 11, lines 10-18). As can be

seen for example, in figures 8A and 8B of Maxted's device that the shape of the stroke

(shape of the electronic ink) affects the mode of the display (i.e., classifying of the

electronic ink) (col. 7, lines 59-65).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time the invention was made to include the teaching of Maxted having the shape of

the electronic ink affects the classifying of the electronic ink, to be incorporated to

Morishita's device so as motivated by Maxted, to reduce the number of symbols used

in an electronic ink device by changing the mode (i.e., the classifying of the ink) based

on the shape of the electronic ink (col. 2, lines 63-67).

As to claim 3, the claim is broad enough that the width determination of the

recorded writing pattern and displayed writing pattern is indicative of determining the

distance (col. 24, lines 41-65).

As to claim 4, as discussed above with respect to claim 3, the width

determination of the recorded writing pattern and displayed writing pattern is indicative

of the ratio of its height to width (col. 24, lines 41-65).

As to claim 5, Morishita teaches anchoring the electronic ink to at least one

object (the object would be the circled written image in figure 44A) by adding a link to

the displayed information (the link would be linking to a search region) (col. 25, lines 45-

48).

As to claim 6, the closed curve (electronic ink) in figures 44A and 44B for search

region is indicative of anchoring the electronic ink to a file position because the search

is carried out by searching the memory (col. 25, lines 59-67).

As to claims 14-19, the claims are referring to a computer readable medium,

which implements the method of claims 1, 3-6, and as can be seen form Morishita's

invention, the device is carried out by a computer readable medium (this is apparent

from the flowcharts throughout the drawings of Morishita). Therefore, the rejections of

claims 1-8 are equally applied to claims 14-19.

As to claim 20, as can be seen above, the closed curve is near the search region, which is similar to the limitation of claim 7 (col. 25, lines 41-58).

As to claim 21, as best understood by the examiner, Morishita (figures 44A and 44B) shows that the electronic ink (the dashed line by the pen) is maintained despite having other information (re-flowing).

Claims 9-13 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morishita and Maxted in view of Wilcox et al. (US patent NO. 5,889,523; hereinafter referred to as Wilcox).

As to claims 9-13, note the discussion of Morishita and Maxted above. As can be seen above, Morishita and Maxted teach all the limitations of claims 9-13 except the citations of classifying the ink as in-line words, text marks, in-line paragraphs and sketches, margin notes or as a connector.

However, Wilcox (figures 3 and 8-9) teaches a method of entering and editing text in a graphic system (col. 2, lines 16-19). Wilcox shows that the ink used is classified as in-line word, text marks, in-line paragraphs, margin notes or a connecter (see figures 3, 8-9, col. 2, lines 16-19, col. 4, line 53 through col. 5, line 11, col. 10, lines 25-33 and col. 11, lines 23-33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Wilcox as indicated above to incorporated to Morishita's device because such classifications of the ink is necessary for manipulating and editing a document in handwriting forms as it is necessary in

managing and editing a conventional word files to facilitate and ease the wok of the user. Furthermore, as motivated by Wilcox, to provide an accurate selection technique for graphical editing (col. 2, lines 20-23).

As to claims 22-26, the claims are substantially similar to claims 9-13 and would be rejected as discussed with respect to the rejections of claims 9-13 above.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morishita and Maxted in view of Huang (US patent NO. 6,384,815).

As can be seen above Morishita (figure 36) shows a chain of strokes. Morishita does not teach associating a center of the chain of strokes with at least one object. However, Huang teaches an automatic highlighting tool for document composing and editing (title). Huang teaches a conformation process, which may also center individual highlighting, strokes on their associated text line (col. 5, lines 2-10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Huang to be incorporated to Morishita's device so as motivated by Huang, to be able to have the device adapt to particular user's writing style (col. 2, lines 14-17).

(11)   Response to Argument

Prior to responding to Appellant's argument; Examiner prefers to describe the invention as disclosed in the claims, and using the broadest reasonable interpretation of the claims. The invention is directed to a pen based electronic device, wherein an electronic pen is used to provide electronic ink. The electronic ink can be used for

different functions, such as highlighting, bookmarks, and the like. The device can

recognize the electronic ink (based on the shape as recited in some of the claims, or

other means) to differentiate between the required functions.

Appellant (bottom of page 9) argued that the Morishita and Maxted combination

fail to reach the inventive computer implemented method or a computer readable

medium as claimed in claims 1 and 14. Appellant (middle of page 10) argued that

Morishita does not classify electronic ink, but merely allows a user to designate a

search region within electronic ink. Examiner respectfully disagrees.

The limitation "classifying said electronic ink based on a shape of said electronic

ink" has two aspects. One aspect is classifying the electronic ink. The other aspect is

having the classification of the electronic ink based on the shape of the electronic ink. In

examining the first aspect, the examiner is using the broadest reasonable interpretation

of such claims. By doing that, the term "classifying electronic ink" is merely equivalent to

identifying that the electronic ink can be used in different modes. As described above,

Morishita shows that the electronic ink (i.e., the writing using the writing device) can be

used for entering handwriting, or erasing mode. Therefore, when the device is used for

handwriting, the electronic ink is classified as ink for writing, and when the device is

used for erasing, the electronic ink is classified as erasing ink. The other aspect, which

is having the classification based on the shape of the electronic ink, examiner cited

Maxted, which clearly shows (figure 8A) classifying the electronic ink based on the

shape of the electronic ink by show that the U shape for example is classified as

underline, and the / shape is classified as delete. Therefore, the examiner believes that

the combination of Morishita and Maxted fairly reads on the claimed limitation. In

conclusion, Morishita teaches the general concept of having the electronic ink classified,

and Maxted teaches classifying the electronic ink based on the shape of the electronic

ink.

Appellant (last paragraph of page 11) argued that Morishita and Maxted do not

reach the present invention, because Maxted does not make up for the deficiencies of

Morishita. Appellant argued that Maxted merely allows a user to place edit symbols in a

selection window, and that there is no teaching nor any reason of modifying Morishita's

search region embodiment with edit symbols of Maxted for text. Examiner respectfully

disagrees.

Maxted clearly shows that using different shapes of the electronic ink will

produce different functions. In other word, each one of the sixteen symbols shown in

figure 8A is classified to perform a certain function to edit the writing on the display (col.

7, lines 59-65). Therefore, Maxted clearly teaches the limitation of adding electronic ink

(any of the sixteen symbols in figure 8A) to the displayed information, and wherein

each of these symbols is classified base on its shape to perform different function. The

motivation of combining the two references is indicated in the rejection above, and that

is to reduce the number of symbols used in an electronic ink device by changing the

mode (i.e., the classifying of the ink) based on the shape of the electronic ink (col. 2,

lines 63-67). It is apparent that Morishita's device is a pen based computer device.

Therefore, it requires editing. By adapting the teaching of Maxted of editing the text

displayed by Morishita, the user can use fewer strokes from the electronic ink to edit

the text, and therefore, reduces both the time and power used. Appellant (top of page 12) cited a court case to show that hindsight cannot be used to construct a rejection. However, examiner respectfully submits that no hindsight was used because both references are analogous art, and the motivation to combine the second reference is clearly stated in the secondary reference (Maxted).

Appellant (bottom of page 12) states that, for claim 2, applicants incorporate by reference the arguments with respect to claims 1 and 14 regarding the step of classifying the electronic ink. Examiner incorporates the response with respect to claims 1 and 14 regarding the same issue. Appellant (top of page 13) argued that Morishita fails to disclose the recited classifying step including classifying electronic ink as one of embedded ink and overlaid ink. Examiner respectfully disagrees.

Examiner respectfully submits that Morishita shows that the electronic ink is embedded ink (col. 30, line 64 through col. 31, line 10). In this section, Morishita states, "a writing section using a special ink is embedded in the information writing section 11". This clearly reads on the claimed limitation. Examiner also submits that the language of claim 2 reciting the embedded ink and overlaid ink is an alternative langue. The claim recites, "wherein said classifying step classifies said electronic ink as one of embedded ink and overlaid", which means that the classifying steps can classify the ink as embedded or overlaid ink. In Morishita's device, the classifying of the ink is embedded. Even if we assume for the sake of argument that the claim language includes both embedded and overlaid ink, the overlaid ink is shown in figure 31B for example, wherein the closed curve performed by the pen is overlaid on to of the image for erasing part of

the image as shown in figure 31C (col. 20, lines 35-41). Examiner also disagrees with the assertion by the Appellant (middle of page 13) that the electronic ink is classified after being added to the information display. The method of claims 2 or 1 and 14 does not restrict the steps of the claims to the order giving in the claims.

Appellant (pages 14-15) argued that with respect to claim 15, to incorporate by reference the arguments with respect to claims 1-2 and 14. Appellant also argued that the Office Action provides no particular reason why one of ordinary skill in the art would use the classifying ink based on shape to classify as one embedded and overlaid ink. Examiner respectfully submits that the response to the arguments presented above with respect to claims 1-2 and 14 substantially applies to the argument of claim 15. as seen above, the combination of Morishita and Maxted fairly applies to the claimed limitations of claim 15, and the motivation to combine the two references is clearly stated above.

Appellant (bottom of page 15 and page 16) argued that with respect to claims 3 and 16, that there is no teaching of the classifying step of determining its distance to other annotations. Appellant also argued that there is no motivation to combine the two references. Examiner respectfully disagrees.

Claims 3 and 16 states, "wherein said classifying step includes the step of determining its distance to other annotations." The claim is silent on what "its" is referring to. Morishita (figures 42A-42D and col. 24, lines 60-65) describes determining the width of the ink. Therefore, examiner believes that determining the width of the ink, which performs the annotations, fairly reads on the claimed limitation of claims 3 and

16. as to the motivation to combine, the motivation is substantially similar to the motivation giving in the rejection of claims 1 and 14.

As to claims 4 and 17, Appellant (pages 16-17) argued that the limitations are not met and that there is no motivation to combine the two references. Examiner respectfully disagrees. As described in the rejection above, and as discussed in the response to claims 3 and 16 above, the recitation of determining the ratio of the electronic ink height to width is taught by Morishita's citation of determining the width of the ink. The motivation of claims 1 and 14 clearly applies to claims 4 and 17.

Appellant (page 18) argued that the limitations of claims 5 and 18 are not met because circling a written image for search is not equal to the concept of anchoring the electronic ink to the at least one object. Examiner respectfully submits that the term "anchoring" means to hold together, which fairly equivalents to circle a written image. The motivation to combine is clearly equivalent to the motivations of claims 1 and 14.

Appellant (page 19) argued with respect to claims 6 and 19, the limitation of having an anchoring step. This limitation and the argument are substantially similar to the argument presented with respect to claims 5 and 18. Examiner clearly responded to this argument in the response to the remarks with respect to claims 5 and 18, and in the Office Action above. Similar arguments are presented with respect to claims 7 and 20 in pages 19-21 (reciting anchoring).

Appellant (page 21) argued the rejection of claim 8 under 35 U.S.C. 112, second paragraph to shows that the concept of re-flow is supported in the specification. Examiner agrees that the concept is described in the Appellant's specification.

However, the term "despite" is not a clear to the examiner to show that the relationship of the electronic ink to the at least one object is maintained after the re-flowing of the displayed information. In other word, it is not clear to the examiner whether the re-flowing has occurred or not. Applicant (page 22) argued that Morishita is completely devoid of a concept re-flowing. Examiner respectfully disagrees. The re-flowing concept as described in the specification is directed to show that the text written in the display can be moved from one location to another based on, for example, if the text is enlarged or minimized. Morishita shows a pen-based computer. It is inherent that the computer includes editing features such as enlarging font, or number of words per line, etc. Therefore, it is inherent to say that when the text is being edited, the encircling of the text would be also edited. The layout engine is the engine responsible for editing the text, which is inherently available in any computer.

The response to claim 21 is substantially similar to the response to claim 8 above, and the examiner would incorporate by reference the response to claim 8 with respect to claim 21.

Appellant (page 24) argued with respect to claims 9 and 22 that, nothing in Wilcox discloses the classifying step including classifying the ink as in-line words in which the at least one object is within a flow of text. Examiner respectfully disagrees.

As discussed above, the combination of Morishita and Maxted shows the limitation of classifying the electronic ink based on a shape of electronic ink. Examiner admits that the combination does not show classifying the ink as in-line words. Examiner cited Wilcox. Wilcox (figures 3 and 8-9) teaches a method of entering and

editing text in a graphic system (col. 2, lines 16-19). Wilcox shows that the ink used is

classified as in-line word, text marks, in-line paragraphs, margin notes or a connecter

(see figures 3, 8-9, col. 2, lines 16-19, col. 4, line 53 through col. 5, line 11, col. 10, lines

25-33 and col. 11, lines 23-33).

The motivation to combine Wilcox is clear and that is, because such

classifications of the ink is necessary for manipulating and editing a document in

handwriting forms as it is necessary in managing and editing a conventional word files

to facilitate and ease the wok of the user. Furthermore, as motivated by Wilcox, to

provide an accurate selection technique for graphical editing (col. 2, lines 20-23). The

argument of claims 9 and 22 substantially applies to the response to claims 10-13 and

23-26. As shown in the Office Action above, Wilcox provides both the limitation and the

motivation to combine.

Appellant (middle of page 30) argued that Morishita does not disclose a

processor that classifies electronic ink and associates electronic ink with the content,

transforms the electronic ink, and outputs the transformed electronic ink. Examiner

respectfully disagrees. The system of claims 27-28 is substantially similar to the method

of claim 2. The processor is shown in Morishita's device, and the classifying of the ink is

discussed above. Outputting the transformed electronic ink simply means displaying the

ink on the display device, which is taught by Morishita as, described above.

Appellant (page 31) is repeating the argument of embedded ink, which is being

taught by Morishita as described above. Appellant (page 32) argued that claim 30 is

allowed because of the argument presented with respect to claim 1. As seen above,

claim 1 is properly rejected, and therefore, claim 30 is also properly rejected.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Amr A. Awad.

A.A.   AMR A. AWAD
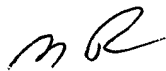December 9, 2004   PRIMARY EXAMINER

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